USER MANUAL

09 CHANNELS HYBRID DIGITAL VIDEO RECORDER

INSTRUCTION MANUAL

To obtain the best performance and ensure device function correctly, please read this instruction manual carefully and completely.

FCC Compliance

USER-INSTALLER CAUTION: YOUR AUTHORITY TO OPERATE THIS FCC VERIFIED EQUIPMENT COULD BE VOIDED IF YOU MAKE CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE TO PART 15 OF THE FCC RULES.

NOTE: THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS.

OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

THIS CLASS A DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS.

WARNINGS, CAUTIONS & COPYRIGHT

WARINGS

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MISTURE.

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK.

DO NOT REMOVE COVER (OR BACK).

NO USER-SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of insinuated "dangerous voltage" within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral rhombus is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying the product.

USERS OF THE SYSTEM ARE RESPONSIBLE FOR CHECKING AND COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND STATUTES COIPCERNING THE MONITORING AND RECORDING OF VIDEO AND AUDIO SIGNALS. ULTRAK SHALL NOT BE HELD RESPONSIBLE FOR THE USE OF THIS SYSTEM IN VIOLATION OF CURRENT LAWS AND STATUTES.

COPYRIGHT

THE TRADEMARKS MENTIONED IN THE MANUAL ARE LEGALLY REGISTERED TO THEIR RESPECTIVE COMPANIES.

TABLE OF CONTENTS

1	INTI	RODUCTION	5
	1.1	FEATURE	5
	1.2	SPECIFICATION	5
2	HAR	DWARE OVERVIEW	9
	2.1	FRONT PANEL	9
	2.2	BACK PANEL	10
	2.3	ADVANCED AUTO SWITCH ZOOM, PTZ, COPY KEY CONTROL &	USB
	INFO	DRMATION	10
	2.4	CAMERA & MONITOR LOOPING	11
	2.5	EXTERAL ALARM	11
	2.6	IR REMOTE CONTROL	12
	2.7	PTZ (PAN, TILT AND ZOOM) CAMERA	13
3	SYS	TEM SETUP	14
	3.1	MENU SETUP INTERFACE(GUI)	
	3.2	LIVE VIEWING AND POP-UP MENU	16
	3.3	CAMERA SETUP	18
	3.4	RECORD SETUP	24
	3.5	ALARM SETUP	25
	3.6	ALARM SETUP	27
	3.7	AUTHORITY SETUP	31
	3.8	DISK MANAGEMENT	33
	3.9		
4	HYB	SYSTEM SETUPRID DVR PLAYBACK	37
	4.1	TIME SEARCH	
	4.2	EVENT SEARCH	
	4.3	BACKUP	39
5	BAC	SYSTEM LOG	41
	5.1	MAIN SCREEN SETTING	
	5.2	USB & LOCAL BACKUP FILE PLAYBACK	
	5.3	BACKUP FILE TO AVI	
6		WORK VIEWING & PLAYBACK	
v	6.1	IP ADDRESS SETUP ON PC SITE	
	6.2	OPTIONAL MICROSOFT INTERNET EXPLORER SETUP	
	6.3	LOGIN	
	6.4	REMOTE CONTROL	
	6.5	CONFIGURE	
ΔP		IX A: RECORDING TIME LAPSE (HOURS)	

APPENDIX B: HDD COMPATIB	LE TABLE	68
APPENDIX C. FRROR MESSA	OF LIST	69



1 INTRODUCTION

1.1 FEATURE

- H.264 hardware video compression
- Recording rate up to 240 PPS @ D1
- Support Mega Pixel IPcam for each channel.
- Real-time Display & Playback.
- Support each channel backup
- Support CMS (Central Management System)
- Powerful mobile surveillance function, support JAVA \(\) blackberry \(\) i-Phone &
 Windows mobile
- Audio : 4 in & 1out/ Audio Backup / Audio Streaming
- Individual recording setup & function for each channel
- Support Privacy Mask.
- HDD damaged block detection & temperature alarm system (HDD S.M.A.R.T)
- Support Pre-alarm
- DVR log function (ex. user login/ logout) for device safety management
- Up to four online clients for independent remote control; individual live-time, play-back & time-search function available

1.2 SPECIFICATION

VIDEO		
MODE	Multiplex	
LIVE-TIME RESOLUTION	720 x 480 (NTSC) 720 × 576 (PAL)	
LIVE-TIME DISPLAY RATE	9 × 30 Frame / Sec (NTSC) 9 × 25 Frame / Sec (PAL)	
IPCAM RESOLUTION Up to 1600 x 1200 (2 M-pixel)		
IPCAM FRAME RATE	Up to 30 FPS @ NTSC per CH	
SPLIT SCREEN	1, 4, 9	
VIDEO INPUT	BNC × 8	
VIDEO OUTPUT (BNC)	BNC × 1	
VIDEO OUTPUT (VGA)	Yes	
VIDEO OUTPUT (HDMI)	Yes	
AUDIO		
AUDIO INPUT	RCA × 4	

AUDIO OUTPUT	RCA × 1	
AUDIO BACKUP	Yes	
AUDIO STREAMING	Yes	
	RECORDING	
COMPRESSION TYPE	H.264	
RECORDING RESOLUTION (D1)	720 x 480 (NTSC) / 720 x 576 (PAL)	
RECORDING RESOLUTION (Half D1)	720 x 240 (NTSC) / 720 x 288 (PAL)	
RECORDING RESOLUTION (CIF)	360 x 240 (NTSC) / 360 x 288 (PAL)	
RECORDING RATE (D1)	720 x 480 up to 240 PPS (NTSC) 720 x 576 up to 200 PPS (PAL)	
RECORDING RATE (Half D1)	720 x 240 up to 240 PPS (NTSC) 720 x 288 up to 200 PPS (PAL)	
RECORDING RATE (CIF)	360 x 240 up to 240 PPS (NTSC) 360 x 288 up to 200 PPS (PAL)	
IPCAM RECORDING RATE	Up to 30 FPS @ NTSC per CH	
RECORDING MODE	Manual / Schedule / Alarm	
PLAYBACK & SEARCH		
PLAYBACK SPEED	Fast Forward X 2 X8 X 16 X32 X64 Picture by picture Playback Pause Fast Backward X32	
TIME SEARCH	Yes	
EVENT SEARCH	Yes	
EVENT LIST	10000 records per H.D.D (Maximum)	
OSD &	CONTROL INTERFACE	
TITLE	8 Characters	
ON SCREEN DISPLAY & SETUP	Time / Date / Setup Menu	
GRAPHIC USER INTERFACE (GUI)	Yes	
DVR CONTROL PANEL	Yes	
MOUSE	Yes	
IR REMOTE CONTROLLER	Yes	
SUPPORT IE · FIREFOX & SAFARI	Yes	
PLAYER	Yes	
STORAGE & BACKUP DEVICE		
	·	

EXTERNAL USB BACKUP DEVICE (PAN DRIVE, HDD, BURNER)	Yes	
INTERNAL DVD BURNER BACKUP	No	
	NETWORK	
ETHERNET	Yes	
ETHERNET COMPRESSION FORMAT	H.264	
IE REMOTE CONTROL	Yes	
DDNS	Yes	
E-MAIL & FTP	Yes	
NETWORK IP	Static/ DHCP/ PPPoE/DDNS	
MULTI-REMOTE CLIENT	Yes (4 Clients at the same time available)	
PDA/ CELL PHONE SUPPORT	Yes	
	ALARM	
ALARM INPUT	2 In	
ALARM OUTPUT	2 Out (NO/ NC)	
MOTION DETECTION	Yes	
MOTION DETECTION AREA	8 x 8 grids	
MOTION DETECTION SENSITIVITY	1~10	
VIDEO LOSS DETECTION	Yes	
ALARM RECORDING	Yes	
PRE-ALARM RECORDING	Yes	
BUZZER	Yes	
SETUF	& OTHER FUNCTIONS	
DST	Yes	
EACH CHANNEL BACKUP	Yes	
WATER MARK	Yes	
PRIVACY MASK	Yes	
PTZ CONTROL	Yes	
RS-485	Yes	
DIGITAL ZOOM	Yes	
PASSWORD CONTROL	Two levels, one for system and the other for HDD format	
KEY-LOCK	Yes	
MULTI-LANGUAGE	Yes	
FIRMWARE UPDATE	USB Host & Update on line	
OTHERS		
POWER INPUT	DC 12V	

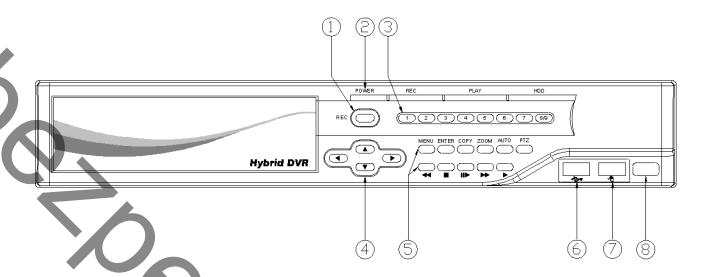
DIMENSIONS (W x H x D)	360mm X 60mm X 311mm
OPERATION TEMPERATURE	0 - 40 ℃

^{*} SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE



2 HARDWARE OVERVIEW

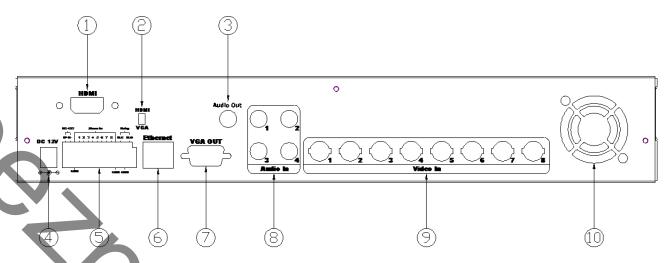
2.1 FRONT PANEL



HYBRID DVR OPERATION

NO.	LABEL	OPERATION	PTZ
1	REC	Button Of Recording.	
2	LED	Led Indicator	
3	1~9	1~9 CH Display Buttons	
4	▲▼∢ ►	Button Of Controller. Button Of Switching Channel.	
5	CONTROL PANEL	Menu, Enter, Copy, Zoom, Auto and PTZ Button.	
6	\$	USB Connector	
7	Mouse	USB Mouse Connector (Only by supplied mouse).	
8		IR Sensor For Remote Control.	

2.2 BACK PANEL



NO.	LABEL	OPERATION
1	HDMI VIDEO OUTPUT	Video output with HDMI connector.
2	HDMI/ VGA	HDMI and VGA output switch.
3	AUDIO OUT	Audio output
4	POWER	Power switcher: DC 12V 5A / 50-60 Hz input.
5	RELAY /RS-232 /RS-485	2 pin connector for external control unit, 8 pin connector for Alarm input and 2 pin connector for relay
6	ETHERNET	RJ-45 connector for network.
7	VGA D-SUB OUT	Connect to CRT or LCD monitor.
8	AUDIO IN	Audio input.
9	VIDEO INPUT	Video input with BNC connector.
10	FAN	Cooling Fan

2.3 ADVANCED AUTO SWITCH ZOOM, PTZ, COPY KEY CONTROL & USB INFORMATION

AUTO SWITCH: In the split screen mode, use the "AUTO" key in the front panel to enable auto switch function. Moreover, press "AUTO" key again to disable it.

ZOOM: In the full screen mode, user can use "ZOOM" button on the front panel to perform ZOOM function. Press ▲ ▼ ◀ ▶, located on the front panel, to move the zoom window.

PTZ: When camera supported PTZ function, user can use "PTZ" button, located on the front panel, to perform PTZ function. Press ▲ ▼ ◀ ► to select and change setup value.

COPY: Within the playback mode, press "COPY" button to start backup record and press "COPY" again to end backup. The user can see the backup image approx.

 $3 \sim 5 \text{ sec.}$

USB INFORMATION: Within the LIVE VIEWING, press "ENTER" key in the front panel will present the USB information. (NOTE: Please confirm that USB Device has plugged into HYBRID DVR.)

2.4 CAMERA & MONITOR LOOPING

Here recommend link cameras by sequence to avoid unexpected image broken, from CH1, CH2, CH3, CH4......

2.5 EXTERAL ALARM

There are three types of alarms that the system can be configured to handle. They are Motion detection Alarm, External Alarm and Video Loss Alarm.

A. Motion detection Alarm and External Alarm:

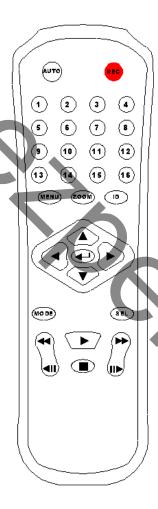
When motion detection or External Alarm was triggered, there are 5 possible actions will be taken.

- a. Monitor will display corresponding full screen alarm channel, it will switch automatic mode to manual mode if buttons pressing activity occurred in 5 seconds.
- b. Relays can be activated by motion detection or external alarm when turning on.
- c. External alarm will be recorded in the event list. Motion detection can be set to yes or no.

B. Video Loss Alarm:

The default setting of Video Loss alarm is enabled and cannot be changed. Although buzzer action can be disabled, an ALM record will still be added to the Event List that indicates the precise time of video loss.

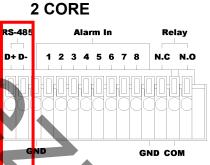
2.6 IR REMOTE CONTROL



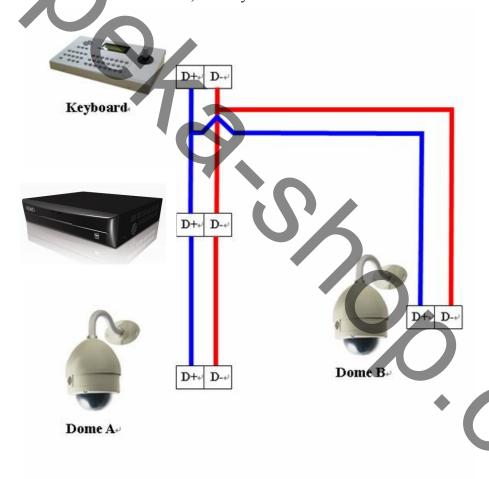
ITEM			
AUTO	Press AUTO to switch channel by channel automatically.		
SEL	Press this button to select the different assembled of camera formats or perform PTZ functions. Moreover, under the 16 split screen and full screen modes, press this button for switching Audio ON/ OFF.		
.REC	Press REC to start recording & again to stop.		
1-16	Press the button to select the channel for full screen.		
*	Fast backward		
	Picture by picture backward play		
	Picture by picture forward play		
***	Fast forward		
Play video forward			
MODE	Split Screen Switch		
ID	**ID setup to control NVRs		
A	Switch split screen & Move upward or increase.		
>	Switch split screen & Move right or increase.		
▼	Switch split screen & Move downward or decrease.		
◄	Switch split screen & Move left or decrease.		
4	To enter item or make choose.		
MENU	To into or exit main menu		
STOP	Stop play and playback		

2.7 PTZ (PAN, TILT AND ZOOM) CAMERA

Following diagram for HYBRID DVR connect between PTZ camera & joystick controller, for HYBRID DVR to control PTZ camera please make sure the CAMERA ID, BANDRATE (default at 9600 bps) and RS-485 cable.



Under "Two Core" connection, controller can control speed dome without integrated protocol into HYBRID DVR. Moreover, one keyboard can connect MAX 256 units of speed dome.



3 SYSTEM SETUP

3.1 MENU SETUP INTERFACE(GUI)



A. CAMERA SETUP



C. ALARM SETUP



E. AUTHORITY SETUP









F. DISK MANAGEMENT

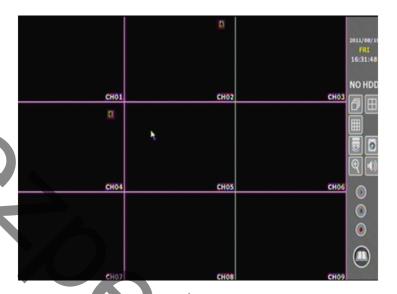




H. EXIT



3.2 LIVE VIEWING AND POP-UP MENU



NOTE: The pop-up menu can be activated by moving the mouse cruise to the bottom of the live viewing screen.



GUI MENU BAR

With live viewing mode, press this button to get into the GUI menu.





DISK INFORMATION

With live viewing mode, press this button to display disk information.



DIGITAL ZOOM

In the live full screen mode, left-click the button of the mouse to pull a range to zoom in or zoom out the image. User can right-click the button of the mouse to disable this function. (NOTE: Using the mouse to operate digital zoom can zoom in to max. 16 times.) Moreover, user can also use ZOOM key on the front panel to perform this function. (First, click ZOOM Key and then click $\blacktriangle \lor \blacktriangleleft \gt$ key to select zoom in or zoom out position. Finally, click ENTER key to complete the setting. Moreover, click ZOOM Key again can disable digital zoom function. Using the panel key to perform zoom in function is fixed at 2 times.)



Within live-viewing mode, Clicks this button to get into the PTZ setup menu. User can right-click the button of the mouse to exit PTZ Setup.

NOTE: Only for the camera supported PTZ function. PTZ CONTROL



Under PTZ control mode, press

into PTZ setup menu.
User can also press the "MENU"
key on the HYBRID DVR front
panel to get into PTZ setup menu.

Press to process Preset Point setup and press to exit setting

To process AUTO function.



Direction key



Press this button to turn the audio on or off o

F. DISPLAY CONTROL

Within live-viewing or playback mode, use display control to switch the camera channel.

G. RECORD AND PLAYBACK CONTROL

Same as front panel controller and remote controller.

3.3 CAMERA SETUP



Press ▲ or ▼ to select items.

Press ◀ or ► to change values.

Press SET to see more options.

A. Camera Setup

Hybrid DVR can connect two various cameras, analog camera or IP-Cam and it can setup 4CHs analog or IP cameras in maximum.

Camera Type in Analog-CAM



Camera Type in IP-CAM



A-1. IPCam Quick Search



Press the "IPCam Quick Search" button and click "Search Device" button in the following, HYBRID DVR will search the IPCAM devices which IP address are setup as the same domain as HYBRID DVR IP address. Moreover, click the IPCam device which from the list can import the device information to the channel automatically without any manual key-in step.

- 1. Enable: Click the checkbox to decide performing the connection or not.
- 2. IP Address: Insert the IP address of the connecting device.
- 3. Port: Insert the port number of the connecting device.
- 4. User: Insert the user name of the connecting device.
- 5. Password: Insert the password of the connecting device.
- 6. State: After click the "connect IPCAM" button to test the IPCAM device, the connection state will reveal among this column.

A-2. Connect IPCAM: After insert the IPCAM related information, click this button to test the connection circumstances.

B. Video Setup

Camera Type in Analog-CAM



Camera Type in IP-CAM



B-1. Resolution

Click drop down list to change the resolution of connecting device.

B-2. Quality

Click drop down list to change the image quality. (Currently, the maximum quality of the 09CH HYBRID DVR is 18M/bps)

B-3. FrameRate

Click drop down list to change the frame rate of connecting device.

B-4. Video System

To reveal the video system of connected IP Cam device. (NTSC or PAL)

B-5. Video Format

To display the video format of connected IP Cam device. (H.264, MPEG4 or MJPEG)

C. IPCam Image Setup

Camera Type in Analog-CAM



Camera Type in IP-CAM



C-1. Display

Use the mouse to enable or disable the camera display on the screen or not.

C-2. Audio

Click the checkbox to decide enable or disable the audio function.

C-3. Title

Use the mouse to setup the title of connecting IP device.

C-4. Contrast

Press ◀ or ▶ to change contrast level. The adjustment value is between 0~255

C-5. Brightness

Press ◀ or ▶ to change brightness level. The adjustment value is between 0~255

C-6. Hue

Press or ► to change hue level. The adjustment value is between 0~255

C-7. Saturation

Press ◀ or ▶ to change saturation level. The adjustment value is between 0~255

C-8. Sharpness

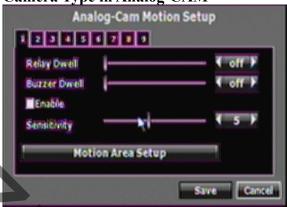
Press \triangleleft or \triangleright / mouse wheel to change sharpness level. The adjustment value is \triangleleft between $0\sim15$

C-9. Switch Dwell

Press ◀ or ▶ to change auto switch second. The value is between 0~99 sec.

D. Motion Setup

Camera Type in Analog-CAM



D-1. Relay Dwell

Press ✓ or ► to change the relay time or disable relay function.

D-2. Buzzer Dwell

Press or to change the buzzer time or disable buzzer function.

D-3. Motion Detection

Click the checkbox to decide enable or disable motion detection.

D-4. Sensitivity

Press ◀ or ▶ to change sensitivity level.

D-5. Motion Area Setup

Press to setup motion area.

Disable Enable All Clean All Exit Without Saving Exit Without Saving

Camera Type in IP-CAM



D-6. Relay Dwell

Press ◀ or ▶ to change the relay time or disable relay function.

D-7. Buzzer Dwell

Press ◀ or ▶ to change the buzzer time or disable buzzer function.

D-8. Area1 Sensitivity

Press ◀ or ▶ to change the sensitivity of setup motion area in Area1. The motion area is drawn in blue.

D-9. Area2 Sensitivity

Press \triangleleft or \triangleright to change the sensitivity of setup motion area in Area2. The motion area is drawn in green.

D-10. Area3 Sensitivity

Press ◀ or ▶ to change the sensitivity of setup motion area in Area3. The motion area is drawn in red.

E. Privacy Setup

Camera Type in Analog-CAM



Camera Type in IP-CAM



E-1. Area1

Click the "Area1" option to setup the mask area. The color of the mask area is blue.

E-2. Area2

Click the "Area2" option to setup the mask area. The color of the mask area is green.

E-3. Area3

Click the "Area3" option to setup the mask area. The color of the mask area is red.



RECORD SETUP



Press ▲ or ▼ to select items.

Press ◀ or ► to change values.

Press SET to see more options.

A. Post-Alarm Record Time

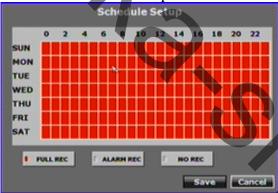
Press or to switch the recording time of post-alarm. The adjusting value is from 5–99 sec.

B. Record Mode

Use the drop down list to switch the recording mode. There are manual, schedule and alarm trigger three varieties of mode.

C. Schedule Setup

Click the "Schedule Setup" button to set the schedule recording time.





ALARM SETUP



Press ▲ or ▼ to select items. Press ◀ or ► to change

values.

Press SET to see more options.

A. Alarm Trigger Setup



A-1. Alarm Auto Switch

Use the drop down list to switch the alarm auto switch. When the alarm is triggered, the screen will switch to full screen, split screen (16CH split screen) or disable.

A-2. Video Loss Detection

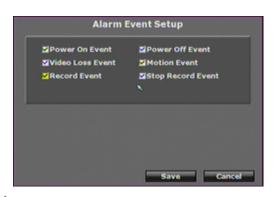
Use the drop down list to switch the video loss detection. When the video loss is detected, the alarm will trigger.

B. Alarm Output Setup



This control item separates into two parts, "Buzzer Time" and "Relay Time". User can press ◀ or ▶ to switch video loss buzzer time in "Buzzer Time" option. The adjustment value is from 5 to 99 seconds. Moreover, among "Relay Time" option, the user can press ◀ or ▶ to switch the video loss relay time. The adjustment value is from 5 to 99 seconds as well.

C. Alarm Event Setup



There are six sort of events can be selected. When the selected items are happened and triggered, the alarm will be activated.





Press ▲ or ▼ to select items.

Press ◀ or ► to change values.

Press SET to see more options.

A. IP ADDRESS SETUP

Press ✓ or ▶ to setup HYBRID DVR IP address.



A-1. IP Mode

Press drop down list to change IP mode to STATIC IP or DHCP.

A-2. IP Address

Use the virtual keypad to setup the HYBRID DVR IP ADDRESS.

A-3. Network

Use the virtual keypad to change SUBNET MASK

A-4. Gateway

Use the virtual keypad to change Default GATEWAY

A-5. DNS1

Use the virtual keypad to change DNS.

A-6. DNS2

Use the virtual keypad to change OTHER DNS.

A-7. WebPage Port

Use the virtual keypad to change the IE browser port.

B. PPPoE SETUP



B-1. PPPoE Setting

Press the drop down list to enable or disable PPPoE.

B-2. User Name

Insert the user name (ADSL account) which provided from local ISP.

B-3. Password

Insert the password which provided from local ISP.

B-4. Password Confirm

Insert the password again to confirm the password.

B-5. State

Present the current status of PPPoE function.

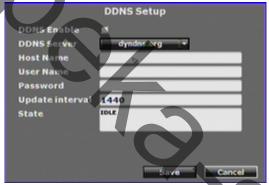
B-6. Send Mail After Dialed

Click the drop down list to enable or disable the function.

B-7. Subject

Insert the mail subject when dialed successfully.

C. DDNS SETUP



C-1. DDNS Enable

Click the checkbox to enable or disable DDNS function.

C-2. Provider

Click the drop down list to select DDNS provider.

C-3. Host Name

Insert the registered host name in the selected provider.

C-4. User Name

Insert the registered user name in the selected provider.

C-5. Password

Insert the registered password in the selected provider.

C-6. Update Interval

A period of time to update IP address.

C-7. State

The state after apply for DDNS.

Updating: Information update.

Idle: Stop service.

DDNS registered successfully, now log by

http://<username>.ddns.camddns.com: Registered successfully.

Updating Failed, the name is already registered.

Updating Failed, please check your internet connection.

D. MAIL SETUP



D-1. Enable

Use the checkbox to enable or disable the Mail Server function.

D-2. Mail Server

The IP address of Mail Server

D-3. SMTP Port

The port of SMTP (known as Simple Mail Transfer Protocol). (Default value is 25)

D-4. User Name

The user name while log in to the mail server.

D-5. Password

The password while log in to the mail server.

D-6. Sender's Mail

The sender's account when send the mail via this mail server.

D-7. Receiver's Mail

The receiver's mail address.

D-8. BCC Mail

The receiver's mail address for Bcc Mail.

D-9. Subject

The subject while sending the mail.

E. FTP SETUP



E-1. Enable

Use the checkbox to enable or disable FTP Server.

E-2. FTP Server

The IP address of FTP Server.

E-3. User Name

The username while log in to the ftp server.

E-4. Password

The password while log in to the ftp server.

E-5. FTP Port

The port number of file transmission. (Default value is 21)

E-6. Path

The ftp path where the user wants to reserve the information.

F. DHCP Server Setup



F-1. Enable

Use the checkbox to enable or disable DHCP Server function. When the function is activated, the HYBRID DVR can be treated as the DHCP server. The HYBRID DVR will assign or distribute one of the IP address which is according to the setup IP address range (start and end IP Address.) to the connecting IPCAM (setup DHCP function as well).

F-2. Start IP Address

Use the virtual keypad to insert the start IP Address of DHCP server.

F-3. End IP Address

Use the virtual keypad to insert the end IP Address of DHCP server.

F-4. Lease Time

Press ◀ or ▶ to change the lease time of DHCP server.

G. UPNP Port Forwarding Setup



G-1. Enable

Use the checkbox to enable or disable UPNP port setup.

G-2. External HTTP Port

Use the virtual keypad to insert the external http port.

G-3. External RTSP Port

Use the virtual keypad to insert the external rtsp port.

3.7 AUTHORITY SETUP



Press ▲ or ▼ to select items.

Press ◀ or ▶ to change values.

Press SET to see more options.

A. HDD Format

Use the checkbox to enable or disable the authority of HDD Format function. If enable this function, the user has to insert password while performing HDD format.

B. Anonymous User Login

Use the checkbox to enable or disable the authority of anonymous user login. If enable this function, the user does not have to insert the username/ password and can view the live image via IE browser.

C. Password Protection

Use the checkbox to enable or disable the authority of password protection.

D. Keyboard Lock

Use the checkbox to enable or disable the operation of control bar which is in the right hand side of live view. The control bar can not work when keyboard lock is activated.

E. User Management

Among this item, user can setup the user management permission and the user authority management.



E-1. Permission

Use the mouse to click the checkbox to modify and alter the user authority.



E-2. Add User





DISK MANAGEMENT



Press ▲ or ▼ to select items.

Press ◀ or ► to change values.

Press SET to see more options.

A. Overwrite Mode

Click the drop down list to enable or disable overwrite function.

B. Hard Disk Full Warning

Click the drop down list to change value to 20/15/10 or 5% with non-overwrite mode. When LEFT RATIO is below the setting, it will enable AUDIBLE ALARM (If AUDIBLE ALARM of BUZZER of ALARM SETUP is ON).

C. Auto Deletion

Click the drop down list to enable or disable auto deletion function.

D. Reserve Day

Use ◀ or ▶ to setup the reserve day. While enable auto deletion function, the data will be removed when reserve day is exceed the setting. The value can be setup between 1~30 days

E. Storage Information

The information of storage device will present in this page.



F. Format HDD

Insert the user name and password while performing HDD format function.





3.9 SYSTEM SETUP



A. System Name

Use the virtual keypad to insert the name of the HYBRID DVR.

B. System ID

Use ◀ or ▶ to setup the HYBRID DVR ID. The adjustment value is between 0~32

C. Language

Use the drop down list to change the HYBRID DVR language. Currently, there are English, Traditional Chinese and Simplified Chinese three options.

D. Date Format

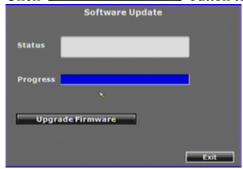
Use the drop down list to change DATE. There are DD/MM/YYYY, YYYY/MM/DD and MM/DD/YYYY three modes.

E. Version

The firmware version of the HYBRID DVR will show in this column.

F. Software Update

Click button to perform firmware updating.



G. Configure Setup

Click the checkbox to select which item can be setup by the user. The user can also load the setting to factory default, load the configure from USB and backup configure to USB.

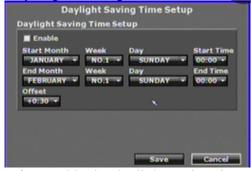


H. Time Setup



Click button within "Time" block can adjust and synchronize the time of the HYBRID DVR as the system time of the PC. Moreover, if the user clicks the enable checkbox and button within the NTP Setup block, the time of the HYBRID DVR will synchronize as the NTP Server.

I. Day Light Saving Time



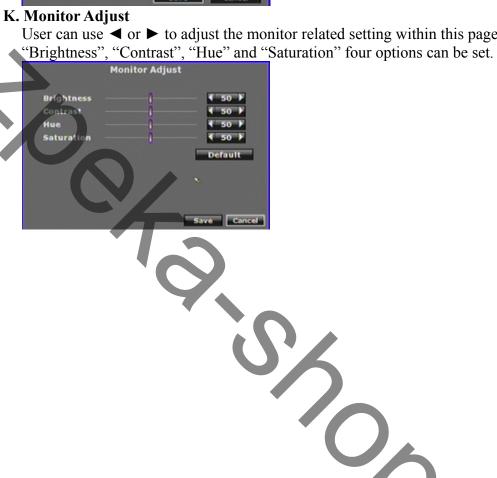
After enable the daylight saving time function, the user can use the drop down list to select the start time and the end time of daylight saving time. After complete the setting, please click button to reserve the setting.

J. Status Display Setup

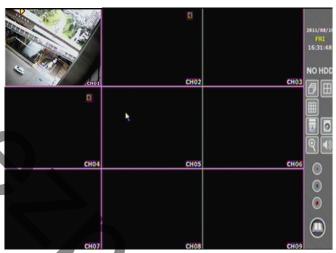
Use the mouse to click the options, which is including "Date and Time Display", "Record Information Display" and "Camera Title Display".



User can use ◀ or ▶ to adjust the monitor related setting within this page, there are



4 HYBRID DVR PLAYBACK



Note: Under playback mode, it will output sound when switch to full screen mode.

A. RECORD BACKUP

With playback mode, press this button to backup record (.264 video backup) and press this button again to finish backup. For performing the single image backup (.Y42 single image backup), press first and then click this button to backup the necessary image.

B. AUDIO CONTROL

Press this button to turn the audio on or off

C. DISPLAY CONTROL

Within playback mode, use display control to switch the camera channel.

D. RECORD AND PLAYBACK CONTROL

Same as front panel controller and remote controller.

E. DIGITAL ZOOM

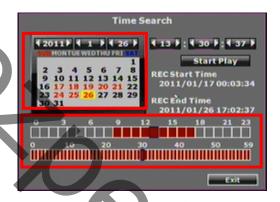
In the live full screen mode, left-click the button of the mouse to pull a range to zoom in or zoom out the image. User can right-click the button of the mouse to disable this function. (NOTE: Using the mouse to operate digital zoom can zoom in to max. 16 times.) Moreover, user can also use ZOOM key on the front panel to perform this function. (First, click ZOOM Key and then click $\blacktriangle \lor \blacktriangleleft \blacktriangleright$ key to select zoom in or zoom out position. Finally, click ENTER key to complete the setting. Moreover, click ZOOM Key again can disable digital zoom function. Using the panel key to perform zoom in function is fixed at 2 times.)





TIME SEARCE

Select the start of playback time and then click start play button to playback the recorded data. If the time contains the recorded data, the time point within this page will become red.





4.2

EVENT SEARCH

After entry to the event search page, user can click the event log item which shown on the list to start playback. Moreover, the user could click button to select the specific event option to filter the event option that shown on the list.







4.3 BACKUP

After click the backup button, the user could use drop down list to select the storage device, USB/ DVD-RW (08CH/ 16CH models) and the backup time selection mode, Time Mode/ Hours Mode. After that, click button to start backup.

TIME MODE

Click ◀ or ▶ to select the start and end backup time.



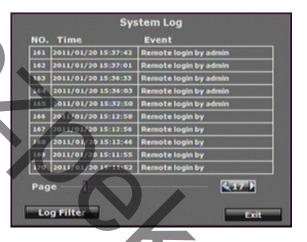
Moreover, among "Select Channel" option, use the mouse to select the channel which is going to backup.





4.4 **SYSTEM LOG**

System log is reserved all of the system record. The maximum storage quantity is 2000. Click Log Filter button to perform the further data filter action. After complete the specific item selection, please click button to reserve the setting. While return to the system log page, it will only reveal the specific selection items.





5 BACKUP PLAYBACK

SYSTEM REQUIREMENT

CPU: Intel Celeron 1.6G MEMORY: 256MB.

VGA: 32MB

VGA RESOLUTION: 1024 x 768.

OS: Windows XP / 2000

SUGGESTED REQUIREMENT

CPU:Intel P4 2.8G

MEMORY:512MB or above

VGA:64MB or above

VGA RESOLUTION:1024 x 768

OS: Windows XP / 2000

NETWORK BANDWIDTH: Upload Speed is 256kbps or above

5.1 MAIN SCREEN SETTING

A. MAIN SCREEN



B. HDD PLAY

Play about all the data from the Hard disk of HYBRID DVR or perform the specific Time and Event Search to play.

Note: Remove the HYBRID DVR HDD and connect to the PC first. Then, use

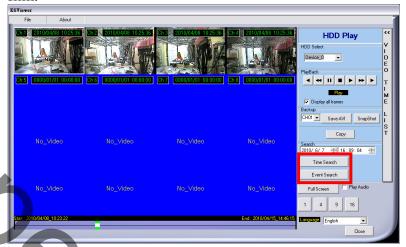
HYBRID DVR player (K6Viewer.exe) to play the data of HDD. HYBRID DVR player (K6Viewer.exe) can be attained from the attached CD or via the Internet; moreover, while performing USB backup and DVD-RW backup, the software will be built automatically as well.





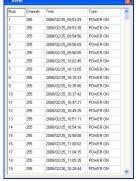
B-1. TIME SEARCH

Insert search Date and Time and then click to play all the searched film.



B-2. EVENT SEARCH

It will display all the events which are reserved within the HYBRID DVR HDD after press Event Search (Shown in the following) and double click left button of mouse to trigger event.



B-3. HDD COPY

Copied and reserved the HYBRID DVR HDD data to other data storage device.



Then, select the "StartTime" and "EndTime".



After that, press button to choose the storage destination and press



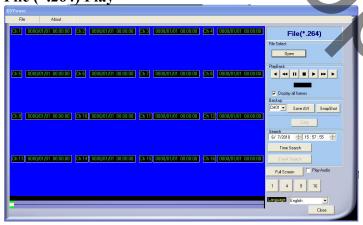


Finally, the complete information will pop-up while finished storage.

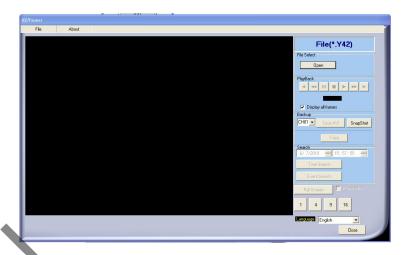


(K6 Viewer.exe) can play not only HYBRID DVR H.D.D (*.idx). but also the *.264 and *.Y42 files which are reserved within the data storage devices. (i.e. CD/DVD disc, pen drive and the PC H.D.D which the data backup from HYBRID DVR H.D.D)

C. File (*.264) Play



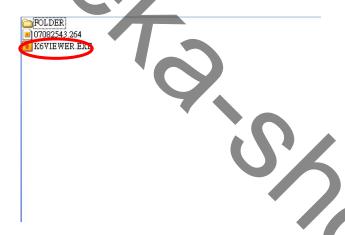
D. File (*.Y42) Play



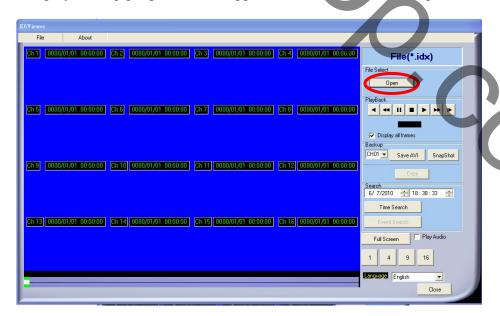
5.2 USB & LOCAL BACKUP FILE PLAYBACK

A. Plug the USB disk into PC or check the local backup folder.

If using USB mode, please double click the player.exe from the pop-up diagram. (As below)

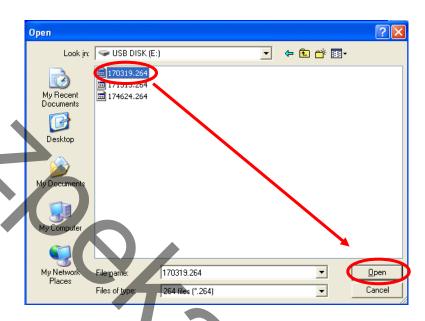


B. The play backup program would appear on the screen, select "Open".

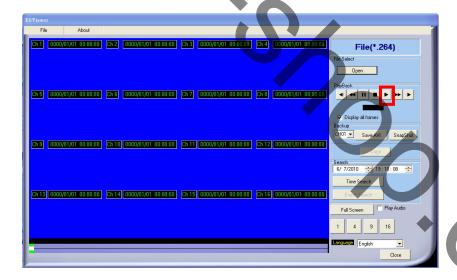


C. Open the USB disk located driver letter. (Example E:) or the local backup folder, and pick the file to playback.

The backup file will named as the time when backup, as like: 170319.264 will be 17:03:19

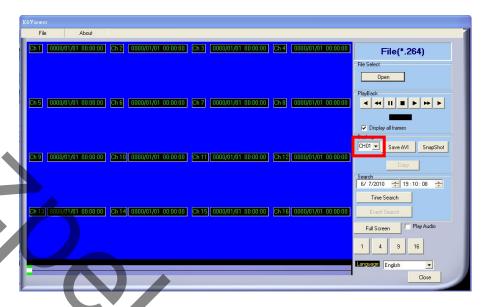


D. Press the play icon to play the video or still picture.



5.3 BACKUP FILE TO AVI

A. Please select specific channel to backup.



- **B.** During video playback mode please press AVI bottom start.
- C. Make up a filename and path than press bottom to start AVI backup.
- **D.** Press AVI bottom StopAVI to finish backup.

6 NETWORK VIEWING & PLAYBACK

SYSTEM REQUIREMENT

CPU: Intel Celeron 1.6G MEMORY: 256MB.

VGA: 32MB

VGA RESOLUTION: 1024 x 768.

OS: Windows XP / 2000

SUGGESTED REQUIREMENT

CPU: Intel P4 2.8G

MEMORY:512MB or above

VGA:64MB or above

VGA RESOLUTION:1024 x 768

OS: Windows XP / 2000

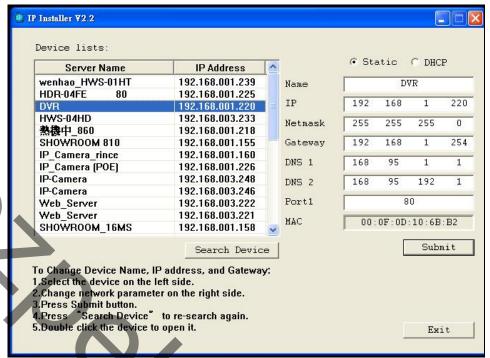
NETWORK BANDWIDTH: Upload Speed is 256kbps or above

6.1 IP ADDRESS SETUP ON PC SITE

Install cameras inside in LAN or use network cable to connect with PC. This is for IPInstallerEng.exe to set up IP address of cameras. If OS is Windows XP SP2 or above, the following Windows Security Alert will popup. Then, please click on <u>Unblock</u>.



Then, IPInstallerEng.exe will popup: HYBRID DVR default IP address is 192.168.1.220



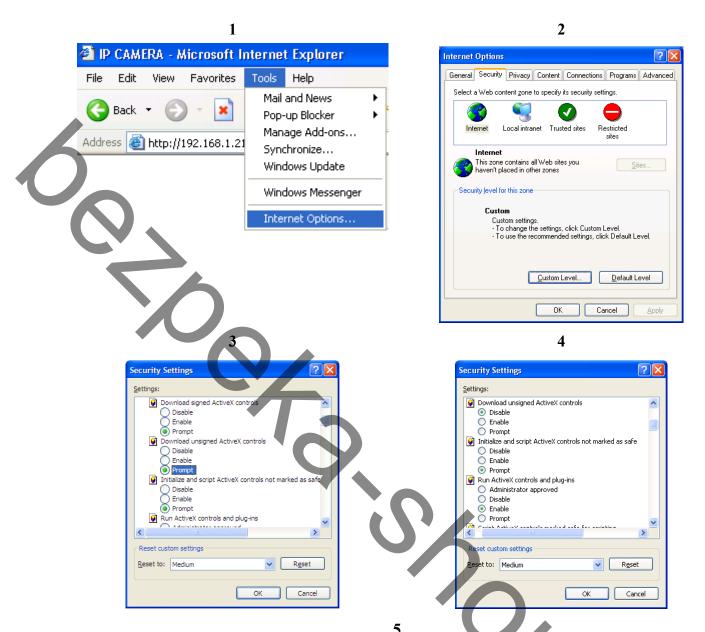
NOTE: Please input correct network parameters without blank spaces.

On Device Lists, it lists all servers. Click on one server and then its IP setting will show on the right side. After editing the parameters and clicking on Submit, the following dialogue box will popup. And, it will reboot the device with new parameters.

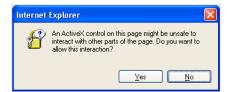


6.2 OPTIONAL MICROSOFT INTERNET EXPLORER SETUP OPTION 1: DISABLE ACTIVEX WARNING

- A. IE → Tools → Internet Options → Security → Custom Level → Security Settings → Download unsigned ActiveX controls → Enable or Prompt (recommend).
- B. IE → Tools → Internet Options → Security → Custom Level → Security Settings → Initialize and script ActiveX controls not marked as safe → Enable or Prompt (recommend).



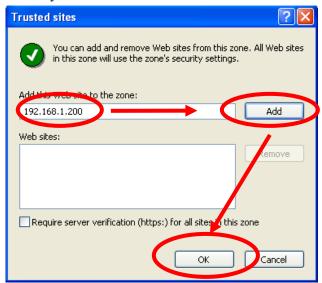
Above three options are all based on select as the prompt. As indicated in the dialogue box. Please select "YES."



OPTION 2: ADD TO TRUSTED SITES

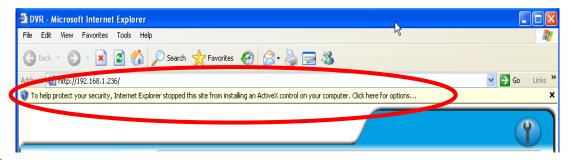
IE \rightarrow Tools \rightarrow Internet Options \rightarrow Security \rightarrow Trusted sites \rightarrow Sites





6.3 LOGIN

A. INSTALL ACTIVEX



B. START INSTALL ACTIVEX



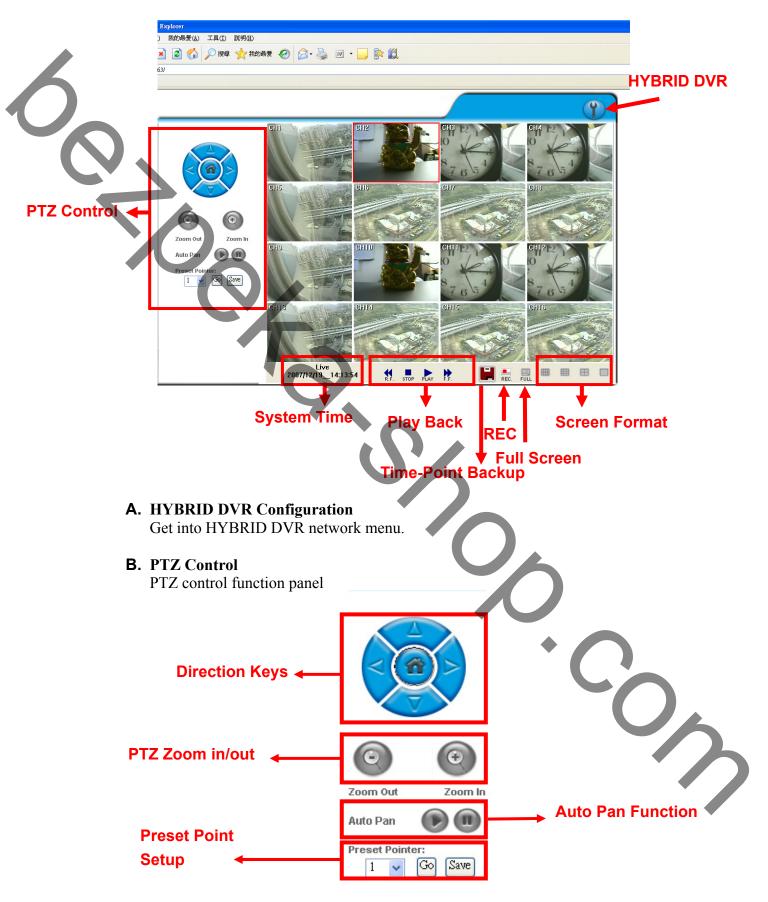
C. ACCOUNT & PASSWORD LOGIN

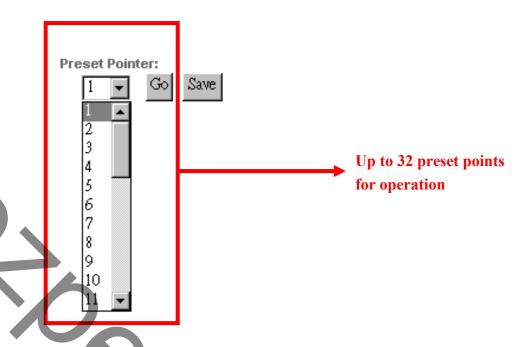
After IP setup and connect to network or LAN, type IP address on IE Browser directly. The following User name & Password Login window will popup.



6.4 REMOTE CONTROL

LIVE VIEWING





C. SYSTEM TIME

Live viewing mode: The current live viewing time.

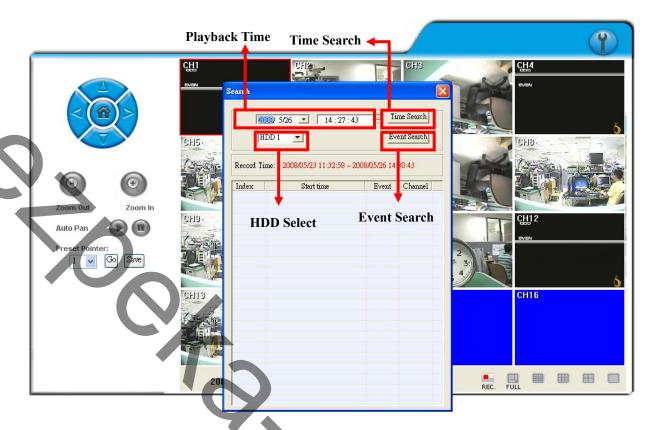
D. SCREEN FORMAT

Switch screen format and click twice to switch different channels with full screen.

- E. Full Screen. Click again to return.
- F. REC. Videos are saved as AVI file.
- G. Playback
- H. Time-Point Backup

Click and playback window will popup

PLAYBACK by TIME SEARCH & EVENT SEARCH



A. HDD Select

User can select HDD1 or HDD2 for playback

B. Playback Time

User can select the time then press "Time Search" for playback.

C. Time Search

User can select the time then press "Time Search" for playback.

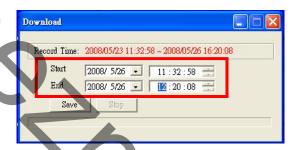
D. Event Search

User can select event item by pressing "Event Search" for playback.

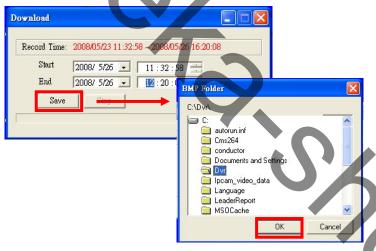
Click to operate Time-Point backup.

TIME-POINT BACKUP

First, select Start and End backup time which have to among the Record Time.



Then, click Save button to select the position on PC where the user is going to backup the data. After that, press OK button to start the backup.



Finally, double-click the left button of the mouse to open the saved backup file. The backup file

20080526113258.264

will named as the time when start to backup, such as, (20080526113258.264) will be 2008/05/26 11:32:58.

OTHER FUNCTIONS



User can use other functions by clicking the left of mouse

A. Snapshot:

User can save any single picture from image

B. Performance:

User can select image quality (high, medium & low)

C. Use Overlay:

User can use Overlay function.

D. Play audio:

User can play audio function by channel.

Note: remote user can receive audio from HYBRID DVR & the audio will be saved with image

when processing video backup.

6.5 CONFIGURE

A. System - System Information

	System Int	formation		
Server Informat	ion			
Server Name:	DVR-16CH			
MAC Address:	00:0f:0d:00:11:f4			
NTP Setting				
Time zone:	GMT+08:00			
NTP Server:	198.123.30.132			
Interval:	12Hours			
			Ar	ply

A-1 SYSTEM INFORMATION

SERVER NAME: This name will show on the IP Installer.

A-2 NTP Setting

NTP SERVER: Revise the time of HYBRID DVR via different NTP Server.

Note: Time zone and Interval cannot adjust in here (User can adjust both in DATE and TIME SETUP option of HYBRID DVR Menu).

B. SYSTEM - USER MANAGEMENT

	User Man	agement	
Anonymous Use	r Login		
	YES	ONO	Setting
Add User			
Username:			
Password:			
Confirm:			
UserGroup:	OUser		
			Add/Set
User List			
Username	User Group	Modify	Remove
admin	Administrator	Edit	
aaaaa	User	Edit	Remove

User Management provides 3 levels of limits of authority: Administrator (the highest), User, and Guest.

Administrator: Possessing the highest level of authority to operate full functions within network.

User: Having Live Image and Video Playback authority. Moreover, PTZ controlled is included as well.

Guest: Only have Live Image authority.

Default administrator account: Username: admin Password: admin

B-1 ANONYMOUS USER LOGIN:

YES: Accept anonymous user login without password as guest login.

NO: Anonymous login unacceptable.

B-2 USER MANAGEMENT:

Add: Input Username and Password and then click on Add/Set to save.

Modify: Click on selected User name on User List and the following window will popup. After inputting Password and Confirm Password, click on **OK**.

Remove: Click on selected User name on the user list and click on **Remove**.



C. SYSTEM / SYSTEM UPDATE

Click on the "Browse" button to select the latest firmware and then press "Upgrade" button to upgrade the firmware.

	System Update	
Firmware Upgrade	****	
Firmware Version:	S1.0.10	
New Firmware:		瀏覽
		Upgrade •

D. NETWORK - IP SETTING

	IP Setting	
IP Assignment		
O DHCP		
Static		
IP Address:	192.168.1.164	
Subnet Mask:	255.255.255.0	
Gateway:	192.168.3.254	
DNS 0:	168.95.1.1	
DNS 1:	168.95.192.1	
Port Assignment		
Web Page Port:	80	
		Apply

D-1 IP ASSIGNMENT

DHCP: In Dynamic Host Configuration Protocol (DHCP) mode, DHCP server will get setting done automatically.

STATIC IP: Please input IP address, Subnet Mask, and Gateway based on network environment.

D-2 PORT ASSIGNEMENT

With IP Share (Router), the following Ports needed to be adjusted in case of conflict.

E. NETWORK - PPPoE

	PPPoE	
PPPoE Setting		
 Enabled 	Disabled	
Username:		
Password:		•
Send mail after	dialed	
Enabled		
Subject:		Apply

E-1 PPPoE SETTING

Click on Enabled to enable ADSL dial function.

Username: Username for ADSL account. Password: Password for ADSL account.

After dialed successfully, new IP address will appear.

E-2 SEND MAIL AFTER DIALED

Click on Enabled to enable SEND MAIL AFTER DIALED function.

E-3 SUBJECT

Mail subject.

F. NETWORK/DDNS SETTING

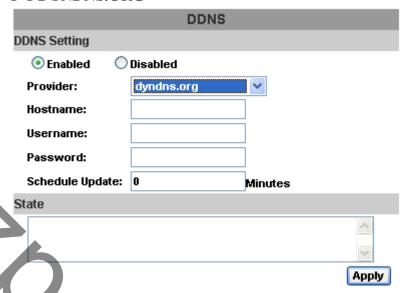
	DDNS
DDNS Setting	
C Enabled ©	Disabled
Provider:	dyndns.org 🔻
Hostname:	
Username:	
Password:	
Schedule Update:	0 Minutes
State	
	Apply

Note

- Schedule Update: Feature of DDNS schedule update is designed for IP products which installed behind the ICS or NAT devices. Update range from every 5 (minutes) to 5000 (minutes) and 0 remain to off.
- Please note that the hostname will be blocked by DynDNS.org if schedule update is more than once every 5 minutes to 60 minutes. In general, schedule update in every 1440 minutes is recommended.

Click on Enabled to enable DDNS function.

F-1 DYNDNS.ORG



DDNS SETTING - DYNDNS.ORG

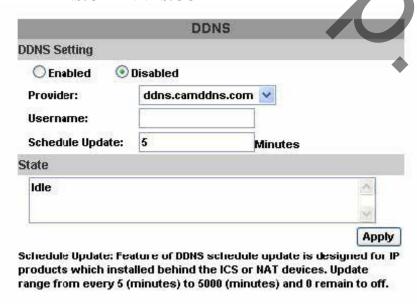
PROVIDER: Select dyndns.org

HOSTNAME: The registered hostname in DYNDNS.ORG. USERNAME: The registered username in DYNDNS.ORG. PASSWORD: The registered password in DYNDNS.ORG. SCHEDULE UPDATE: A period of time to update IP address.

STATE

- 1. Updating: Information update.
- 2. Idle: Stop service.
- 3. DDNS registered successfully, now log by http://<username>.ddns.camddns.com: Registered successfully.
- 4. Updating Failed, the name is already registered.
- 5. Updating Failed, please check your internet connection.

F-2 DDNS.CAMNNDS.COM



DDNS SETTING - DDNS.CAMDDNS.COM

PROVIDER: Select ddns.camddns.com

USERNAME: The registered username in DDNS.CAMDDNS.COM.

SCHEDULE UPDATE: A period of time to update IP address.

STATE

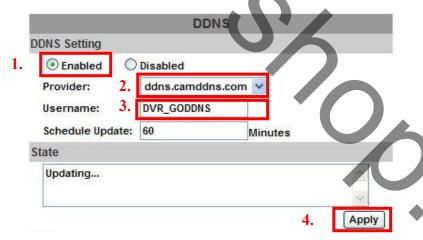
- 1. Updating: Information update.
- 2. Idle: Stop service.
- 3. DDNS registered successfully, now log by http://<username>.ddns.camddns.com: Registered successfully.
- 4. Updating Failed, the name is already registered.
- 5. Updating Failed, please check your internet connection.

DDNS Setting Steps:

Press (1) "ENABLE" option to enable DDNS function and select (2)

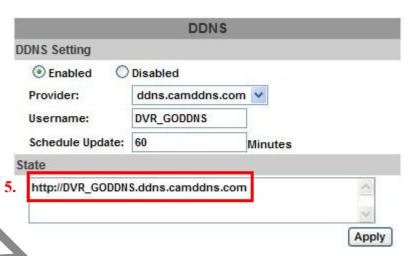
"ddns.camddns.com" of the provider drop down list which is suggested to use. In the following, insert (3) the username which the user wants to apply

(i.e. **HYBRID DVR_GODDNS** in here). After that, click (4) "Apply" button to apply a DDNS domain name.



Finally, the HYBRID DVR domain name (5)(http://HYBRID

DVR GODDNS.ddns.camddns.com) will be shown on the state block.



- NOTE: 1. If the user selects another provider which is ddns2.ydsHYBRID DVR.com, all of the setting steps are the same with ddns.camddns.com setting.
 - 2. However, if dyndns.org provider is selected, please go to www.dyndns.org website to register the account first. The user has to fill in the username, password and hostname for applying the account. After the user applied the account successfully, the dyndns.org will give the user a complete DDNS domain name.
 - 3. If setting up IP schedule update too frequently, the IP may be blocked. In general, schedule update every day (1440 minutes) is recommended.

G. NETWORK / Mail & FTP

Click on "Motion" or "Alarm" option to enable Mail Setting and FTP Setting function.

		Mail & FTP	
	Mail Setting: Mot	tion Alarm	
	Mail Server:		
	SMTP Port:	25	
	Username:		
	Password:		
	Sender's Mail:		
CAI	Receiver's Mail:		
	Bcc Mail:		
	Event Subject:		
	FTP Setting: Mot	ion Alarm	
	FTP Server:		
	Username:		
	Password:		
	Port:	21	
	Path:		
	`		Apply

Mail Server: The IP address of Mail Server (i.e. mail.huntelec.com.tw).

SMTP Port: The port of SMTP (known as Simple Mail Transfer Protocol). (Default

5/2

value is 25)

Username: The username while log in to the mail server. **Password:** The password while log in to the mail server.

Sender's Mail: The sender's account when send the mail via this mail server.

Receiver's Mail: The receiver's mail address.

Bcc Mail: The receiver's mail address for Bcc Mail.

Event Subject: The subject of this mail. (Default value is ALARM MAIL)

FTP Server: The IP address of FTP Server.

Username: The username while log in to the ftp server.

Password: The password while log in to the ftp server.

Port: The port number of file transmission. (Default value is 21)

Path: The ftp path where the user wants to reserve the information.

Finally, click on Apply button to reserve the setting.

H. OTHERS / Player Downloaded

User can click "Run" button to download the player to local PC.



1. OTHERS/ HYBRID DVR Setting

HYBRID DVR setting can be changed via the Internet.



Warning: Apply NVR setting will cause browser to freeze for seconds while upgrading.

APPENDIX A: RECORDING TIME LAPSE (HOURS)

	2 T B		UN	IT: Hours
				TI TIOUIS
IMAGE QUALITY (Mbps)	LOW(0.25M)	MEDIUM(0.5M)	STANDARD(1M)	HIGH(1.5M)
	AVERAGE	AVERAGE	AVERAGE	AVERAGE
16CH	960	480	240	160
	4TB	•	UN	IT: Hours
IMAGE QUALITY (Mbps)	LOW(0.25M)	MEDIUM (0.5M)	STANDARD (1M)	HIGH (1.5M)
	AVERAGE	AVERAGE	AVERAGE	AVERAGE
16CH	1920	960	480	320
	6ТВ		UN	IT: Hours
	, (
IMAGE QUALITY (Mbps)	LOW(0.25M)	MEDIUM (0.5M)	STANDARD (1M)	HIGH (1.5M)
	AVERAGE	AVERAGE	AVERAGE	AVERAGE
16CH	2880	1440	720	480
	8TB		UN	IIT : Hours
IMAGE QUALITY (Mbps)	LOW(0.25M)	MEDIUM (0.5M)	STANDARD (IM)	HIGH (1.5M)
	AVERAGE	AVERAGE	AVERAGE	AVERAGE
16CH	3840	1920	960	640

^{*} The value is for reference only

APPENDIX B: HDD COMPATIBLE TABLE

Brand	Model	Capacity	others
SEAGATE	STM3250820AS	250 GB	7200 10
•	ST3250310SV	250GB	SV35.3
	ST3400620AS	400 GB	7200 10
	ST3500320SV	500GB	SV35.3
	ST3500320AS	500GB	7200 11
	ST3500418AS	500GB	7200 12
	ST3750640AS	750 GB	7200 10
	ST3750330AS	750 GB	7200 11
	\$T31000333AS	1TB	7200 11
	ST31000340AS	1TB	7200 11
	ST31000340NS	1TB	Barracuda ES.2
	ST31000340SV	1TB	SV35.3
	ST31500341AS	1.5TB	7200 11
WD	WD1600AAJS	160 GB	7200 CB
	WD2500AAK\$	250 GB	7200 CB
	WD2500AVVS	250 GB	7200 GP
	WD5000AACS	500 GB	7200 GP
	WD5000AVVS	500 GB	7200 GP
	WD5000AAKS	500GB	7200 CB
	WD6400AAKS	640 GB	7200 BLUE
	WD6400AVVS	640 GB	7200 GP
	WD7500AACS	750GB	7200 GP
	WD7500AVVS	750GB	7200 GP
	WD10EACS	1TB	7200 GP
	WD10EADS	1TB	Caviar Green
	WD10EVDS	1TB	Green Power
	WD10EVVS	1TB	7200 GP
	WD15EADS	1.5TB	7200 GP
	WD15EARS	1.5TB	7200 GP
	WD20EADS	2.0TB	7200 GP
HITACHI	HDS721616PLA380	160 GB	7200
	HDT725025VLA380	250 GB	7200
	HDT725032VLA360	320 GB	7200
	HDP725050GLA360	500 GB	7200
	HCP725050GLA380	500GB	7200
	HDT721010SLA360	1TB	7200

^{*} The compatible table is for reference only

APPENDIX C: ERROR MESSAGE LIST

ERROR MESSAGE	ERROR STATUS & REASON	NOTE
DISK ACCESS ERROR!	H.D.D. Data structure Un-normal.	
	Data does not record into HYBRID DVR or bad sector on	
	HYBRID DVR H.D.D. Please install another H.D.D. and	
	perform the record again.	
UPDATE FILE ERROR!	Please re-download the update file and update again.	
FIRMWARE UPGRADE	Please reboot the HYBRID DVR and upgrade the firmware.	
FAILED	Please send the HYBRID DVR back to repair when	
	HYBRID DVR is disability.	
MEDIA ACCESS FAIL!	The USB file format is incorrect (Please format the pen	
	drive to FAT32) or Pen Drive is setup to ONLY READ mode	
	(Please annul ONLY READ mode) when reserve the data by	
	using Pen Drive. The data cannot be burn into CD/DVD	
	disc. Please change another CD/DVD disc and backup the	
	file in CD/DVD disc storage.	
NO FILE!	There is no upgrade file within Pen Drive or the name of	
	upgrade file does not correspond with HYBRID DVR	
	format. Please adjust the upgrade file name based on the	
	following information.	
	16CH -> UpdateR.bin	
	08CH -> Update8.bin	
	04CH -> Update4,bin	
USB DEVICE NOT FOUND	Pen Drive undetected. Please Unplug the Pen Drive and plug	
NO USB	it again.	
BACKUP START TIME	Backup start time error.	
ERROR		
BACKUPEND TIME ERROR	Backup end time error.	
DISK ERROR	The data cannot be burn into CD/DVD disc. Please change	
	another CD/DVD disc and backup the file.	
FAN FAILED	Fan Error Warning.	
NO LOG DATA	No Events Record.	4
SCHEDULE RECORD	The condition is caused by trying to stop recording when	1
	perform the schedule record. Please setup the record to	
	manual mode and then stop the record.	
PLEASE SELECT ONE	The message will be shown while using the ZOOM function	_
CAMERA	under split screen condition. Please switch the screen into	
	full screen mode and then operate the ZOOM function.	